

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/09031

A. CLASSIFICATION OF SUBJECT MATTER		
IPC(7) : C12N 13/00 US CL : 435/173.6, 173.7, 173.8		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/173.6, 173.7, 173.8		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,128,257 A (BAER) 07 July 1992 (07.07.1992), see entire document, especially the paragraph bridging columns 4-5.	1-7
Y	US 6,120,493 A (HOFFMAN) 19 September 2000 (19.09.2000), see entire document including column 9, lines 59-67.	1-7
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
Special categories of cited documents		
A document defining the general state of the art which is not considered to be of particular relevance	*T* later documents published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
B earlier application or patent published on or after the international filing date	*X* documents of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, each contribution being obvious to a person skilled in the art	
O document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family	
Date of the actual completion of the international search 07 October 2003 (07.10.2003)		Date of mailing of the international search report 02 JAN 2004
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230		Authorized officer Christopher R. Tate Telephone No. 703-308-0196 <i>Janice J. Tate</i>

Form PCT/ISA/210 (second sheet) (July 1998)